BRUHAT BANGALORE MAHANAGARA PALIKE

Yelahanka Zone, Electrical Division

Detailed Estimate for Providing remaining S.V.Lamps and electrical fitttings at Ward No-09 in Vidyaranyapura Sub-division.

Budget Head :

Ward No.9 Estimate No:- For Rs.15,00,000.00

Sl No	Description Of Work	Qty	Rate	Unit	Amount
	KPWD (Ele) S.R.2014-15				
1 P.No 22 I.No4.16	Supplying High pressure sodium vapour street light luminaire suitable for use with high pressure sodium vapour lamp with integrated control gear and grey colr powder coated. The fitting shall be non corrosive pressure die cast aluminium housing with high purity anodized aluminium housing with EPDM Gaskets suitable for Outer Dia of pole 40 mm -60 mm. Cable entry through a cable gland with toggle clips. IP65 protection for both optical & electrical compartment. Bottom cover may be with poly carbonate/tempered/ toughened glass.Luminaire efficiency should be > 60 % and ambient temperature >35 deg C. High Intensity Discharge electro magnetic ballast with copper winding of Orthocyclic winding coil. Class H insulated dual coated copper wire. Complaince to IEC 61347-2-9 Safety & IEC 60923-Performance. Winding Temperature rise " T=70 deg C. Luminaire shall be suitable to operate on 230/250 V 50 Hz AC supply finish including wiring , Ignitor, condenser, SS Toggles for opening front hingeable glass 250 Wattsa) Group 'A'	130	6900.00	Each	897000.00
2 P.No-108 I.No-17.3	Supplying and Fixing 50mm class A GI pipe up to 4.5 mtrs. long with a reducing collar of 50x40mm to which, an extension of 250 mm pipe is fixed for 125 or 250/400 watts MV / sodium vapour street light fitting, using suitable clamps, bolts ,nuts, and wiring using suitable capacity wires.	50	2258.00	Each	112900.00
3 P.No-108 I.No-17.1	Supplying and Fixing of..... mm dia class A GI pipe bracket up to 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires 17.1.2)Using 32mm dia G.I.pipe	80	893.00	Each	71440.00
4 P No-56 I No-7.6.1	Supplying of 1.1 KV grade Aerial Bunched Cable Stranded and Compacted Aluminium Phase Conductor and Stranded Messenger Conductor with all aluminium Alloy, Phase Conductor is insulated with XLPE Compound, Insulated Messanger with SpecifiedIS-14255:1995 & confirming to GTP of Group A 2X16+1X25Sqmm	1250	92.00	mtr	115000.00
5 I no-26.5	Striniging of 1.1 KV grade aerial bunched 3 core cable of XLPE insulation standard aluminium conductor standard around a weather resistant black XLPE insulated AAA messanger wire (3X 25 Sq mm + 1X 16 sqmm + 1X 25Sqmm + 1X 35 sqmm)	1250	8.96	P/Mtr	11201.25
6 9/286	Dead End Clamp/ Anchor clamps assembly 25 to 95 sqmm bear messanger (Standard Stock materials 2010-11)	5	140.00	Nos	700.00
7 9/287	suspension clamp assemblly 25 to 95 sqmm bear messanger (Standard Stock materials 2010-11)	50	280.00	Nos	14000.00
8 13/255	Errection of suspension clamp 25 to 95 sqmm bear messanger (Labour charges 2010-11)	50	85.00	Nos	4250.00
9 13/256	Errection of Anchor clamp 25 to 95 sqmm bear messanger (Labour charges 2010-11)	5	85.00	Nos	425.00

10 P.No-33 I.No-5.4.2	Supply and fixing of ..... cross arm including all Hardwares compete as per the standard technical specification.b) 2 Pin 45x45x5mm-510mm	50	306.00	Each	15300.00
11 P.No-108 I.No-17.5	Fixing halogen/metal halide/SVL/IL /LED floodlight fitting over existing pole/wall ceiling including clamps ,bolts ,nuts and wiring using suitable capacity wires complete Labour charges for releasing of material shall be at 90 % of the cost of erection Rate of fixing is Rs.176.00 =0.9 X 306.00=158.4 Therefore 176.00+158.40=334.40	25	334.40	Each	8360.00
12 P.No-51 I.No-6.48.3	Supplying and fixing of Solar Lux level Street light control switch three phase including suitable capacity contactor 12 KW **Specification of Timer:**The ON & OFF timing is based on astronomical twilight data so it helps in the precise switching ON & OFF of the lighting load.The ON & OFF pre-programmed time intervals can be modified by the user. Micro processor based electronic timer consisting of LCD, builtin Real Time Clock and keypad with options to operate Electronic contactor in programmable mode or astronomical mode or depending on light intensity(lux level using IR sensor) **Specification of Electronic Contactor: 125Amps Electronic contactor with suitable heat sink to withstand load** The Electronic Contactor unit is controlled by the MCU and the same is mounted on an aluminium heat sink to dissipate the heat and thereby keep the junction temperature under the safe operating limit. The Electronic Contactor is connected to the lighting load and will provide better switching reliability and trouble free operation with longer life since there is no moving parts. The Electronic Contactor's are resistant to vibration, shock and humidity. It will not generate RFI,EMI and there is no arcing of contacts. Features:Reliable and Safe Switching. Input :170V – 280V AC Displays ON & OFF timing. Frequency : 50Hz ± 5% EC Turn On Time : 40 msec EC Turn OFF Time : 80 msec EC Input Resistance : 20K Ohm Programmable ON & OFF timing.	10	15730.00	mtr	157300.00
13 P.No-50 I.No-6.42.1	Supply and Installation/Fixing/ Provision of Outdoor type Thermoplastic modular panel enclosure with transparent polycarbonate lid, shock proof, IP 65 (Weather Proof) rust proof, water proof, corrosion proof having internally embedded gasket on both lid and flap suitable to fix. Single phase/three phase energy meter in suitable base plate and having a provision for Fuse/MCB cutout with suitable transparent hinged flap opening for operating MCB along with complete tamper proof SEALING facility 300x300x214mm	10	4266.00	each	42660.00
14 P.No-49 I.No-6.39.1	Supplying and fixing angle iron frame work fabricated out of M.S angle iron... and M.S. flat... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint.	10	263.00	mtr	2630.00
15 P.No-47 I.No-6.16.1	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' type curve, indicator ON/OFF, energy cross-3 with short circuit breaking capacity of 10K and Complete wiring as required. 5-32 Amps SP	20	418.00	each	8360.00
16 P.No-50 I.No-6.41	Supply and Installation/Fixing/Provision for mounting of HRC Fuse /MCB with suitable connector/teminal for 3 Ph/1 Ph connections with Loop-in & Loop-Out terminals for 10 Sqmm/25 sqmm 3.5 C Al/AR/Cu/AR Cable and branchout 2.5 Sqmm 2 Core Al/Cu PVC insulated cable, enclosure, which should be shock proof, safe IP 65 (Weather Proof), rust proof, dust proof, water proof having Internally Embedded Gasket with provision for cable entry through IP 65 Thermoplastic, Polyamide glands and /or grommets.	10	2178.00	Each	21780.00

17 P.No-17 I.No-3.10	Supplying and fixing hylum brand hand plastic sheet 3mm thick with necessary nitches for fixing switches, regulators etc., and fixing on existing wood or metal box using N.F.screws	4000	0.22	SqCm	880.00
18 P.No-64 I.No-7.21.7	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes 25 sqmm long barrel	60	20.59	Each	1235.40
19 P.No-56 I.No-7.4.5	Supplying of 1.1 KV LT UG cable having aluminium conductor PVC insulated, extruded inner sheathed, galvanized, steel strip confirming to IS-3975:1990 (No of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1998 & confirming GTP of GROUP-A. 3.5 core 25 sqmm	70	165.60	mtr	11592.00
20 P.No-61 I.No-7.8.6	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe/ stoneware pipe/ on wall/ on pole as required.II. On wall /Structure 25 sqmm to 75 sqmm	70	34.80	mtr	2436.00
	Miscellaneous				550.35
	TOTAL				**1500000.00**

CERTIFICATE :-

1. The place was inspected and the work is essential.
2. The provision made in the estimate are adequate and necessary and the work comes in the BBMP limit and is legitimate Charges on the BBMP funds.
3. The estimate is based on KPWD (Ele) S.R.2014-15 Rates Effective from 1-08-2014 , BESCOM SR and

Assistant Engineer (Ele)
Yelahanka Zone

Asst. Executive Engineer (Elecl)
Yelahanka Zone

EXECUTIVE ENGINEER (ELECL)
Yelahanaka Zone, BBMP

Administrative Approval
Accorded For 15.00 lakh Rs.
Head of A/C..P3089
CER NO :..13.. Dt: 19.08.15

TA CE (YNK)

Technical Sanction
Accorded For 15.00 lakh Rs
Head of A/C..P3089
CER NO :..13.. Dt:..19.08.15

TA CE (YNK)